Scientific Note

THE PAPER WASP POLISTES DOMINULUS (CHRIST) (HYMENOPTERA: VESPIDAE) IN THE STATE OF WASHINGTON

Polistes dominulus (Christ) is native to the Palearctic region, where it is broadly distributed (Carpenter 1996. Mem. Mus. Nat. Hist. Not., 173: 135–161). It is a "hitchhiker" species, apparently traveling around the world with human traffic and commerce. It has been introduced into North America; first reported as Polistes gallicus (L.) in Massachusetts (Hathaway 1981. Psyche, 88: 169–173). Polistes dominulus appears to now be generally distributed in much of the northeastern U.S., and westward at least into Ohio and Michigan (Jacobson 1994, Sphecos 27: 14; Judd & Carpenter 1996. Great Lakes Entomol., 29: 45–46; Staines & Smith 1995. Proc. Entomol. Soc. Wash., 97: 891). It has not been reported heretofore in western North America. We report here the establishment of Polistes dominulus at multiple sites in central Washington (in the Yakima Valley) as well as in Pierce County, west of the Cascade Mountain Range.

In an urban neighborhood of Sunnyside, Yakima County, Washington, on 4 Sep 1998, a cluster of wasps was observed on the front of a travel trailer in the front yard of a residence. On closer inspection, it was noted that wasps were entering and exiting a break in the wall of the trailer, with about 30 wasps remaining outside within 15 cm of that opening. These wasps were not collected, but were photographed, and appear to be *P. dominulus*. Later that day, five *Polistes dominulus* were collected on a hedge of planted snowberry, *Symphoricarpus albus* (L.), heavily visited by golden paper wasps, *Polistes aurifer* (Saussure). *Polistes dominulus* were also observed entering a garage at the same site via a fallen soffet under an eave and also were entering a gap in a cinder block wall.

On 5 and 6 Sep 1998, five male P. dominulus were netted while they were flying about an ornamental crabapple tree in a suburban neighborhood 4–8 km west of the City of Yakima. A small nest (about 40 cells) occupied by eight P. dominulus wasps was later (18 Oct) observed under an eave on the south side of a residence at the same location. On 7 Sep 1998, two active colonies were located near Ahtanum, in the West Valley area of Yakima County. Both nests were under an eave on the east side of a garage, with one abutting the envelope of a nest of the aerial yellowjacket Dolichovespula arenaria Fabr. The P. dominulus nest adjacent to the aerial yellow jacket nest was collected. It was 18×14 cm in diameter and contained 322 cells. There were 23 wasp pupae and 7 larvae in the cells of that nest. Forty-one female and 3 male wasps were collected with the nest, while 2 escaped. On 8 Sep 1998, 11 paper wasp nests were located under eaves of a house in the city of Yakima. Seven of these nests were occupied by P. dominulus wasps, and 4 were not occupied. The two largest nests were collected. A nest on the east side of the house was 17 cm in diameter and contained 412 cells with 27 pupae, 45 larvae and 12 eggs. Many cells appeared to contain honey; probably concentrated sugars from honeydew (Rau, 1928. Biol. Bull. Marine Biol. Lab., Woods Hole, Massachusetts, 24: 503-519). There were 42 female P. dominulus

Scientific Note

A NEW HOST RECORD OF ORNITHOPHILA GESTROI (DIPTERA: HIPPOBOSCIDAE) ON THE LESSER KESTREL (FALCO NAUMANNI FLEISCHER) IN GALAXIDI, GREECE

Field research on Lesser Kestrels (Falco naumanni) breeding in Greece revealed occurrence of the bird-lousefly, Ornithophila gestroi (Rondani). On 1 Apr 1994 in the town of Nikea, two to four louseflies were observed trailing a few cms behind Lesser Kestrels in flight. These louseflies easily tracked the aerial maneuvers of kestrels, even during rapidly circling courtship flights. It appeared that individual flies could enter and exit the kestrels in flight.

On 13 Jun 1995, while banding Lesser Kestrels in Galaxidi, a breeding female captured at 0800, weighing 147 gm, wing chord 244 mm, tail length 161 mm, tarsus length 37 mm, with #1 and 2 left secondaries absent: Band #000175 had seven bird-louseflies of which five were captured and preserved in an alcohol solution of a local spirit called tsipouro. These rapidly moving flies within the plumage of the female were difficult to capture. When pursued, *O. gestroi* left the falcon.

Bird-louseflies were found on young and in nests of Lesser Kestrels. Because the Lesser Kestrel is a social falcon, nesting colonially in houses and outbuildings of villages and cities, the bird-lousefly readily moves among the nesting falcons. The occurrence, however, of this hippoboscid is rare in the falcons of Greece. Infestations ranged from two to seven flies per falcon; most birds under study were free of *O. gestroi*.

T. C. Maa (Pacific Insects Monograph 20: 1–23, 1969) found the bird-lousefly, O. gestroi to be confined to the Mediterranian subregion and to the Falconiformes: Falconidae. Within the Ornithomyinae, Ornithophila is an archaic and rare genus with a single male and four females constituting the type series in Genoa, Florence, and Harvard Museums. Galita Island near Malta, Crete, and Tangier are the only localities with host documentation on record, with specimens collected from Eleanora's Falcon (F. eleonorae Gene) and Common Kestrel (F. tinnunculus L.).

The five specimens taken in this study from mainland Greece represent both a new host in Lesser Kestrels and locality at Galaxidi. Because the Lesser Kestrel migrates to subsaharan Africa during the non-breeding season, *O. gestroi* can be expected on that continent. Collected specimens reside at the California Academy of Sciences and the J. Gordon Edwards Museum of Entolmology at San Jose State University, San Jose, CA 95192.

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